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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/750,432	12/28/2000	Lynh Nguyen	STL919990134US2/A8645	7994
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SUGHRUE MION PLLC USPTO CUSTOMER NO WITH IBM/SVL 2100 PENNSYLVANIA AVENUE, N.W. WASHINGTON, DC 20037			EXAMINER CHANKONG, DOHM	
			ART UNIT	PAPER NUMBER
			2452	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/750,432

Applicant(s)

NGUYEN, LYNH

Examiner

DOHM CHANKONG

Art Unit

2452

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 March 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3, 5-9, 11-13 and 38-64 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 5-9, 11-13, and 38-64 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/C)
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date: _____

DETAILED ACTION

1. This action is in response to Applicant's request for continued examination filed on 2/24/2009 and supplemental amendment filed on 3/4/2009. Claim 1 is amended. Claim 37 is cancelled. Claims 47-64 are added. Accordingly, claims 1, 3, 5-9, 11-13, and 38-64 are presented for further examination.
2. This action is a non-final rejection.

Continued Examination Under 37 CFR 1.114

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/24/2009 has been entered.

Response to Arguments

Applicant's arguments with respect to claims 1, 3, 5-9, 11-13, and 38-64 have been considered but are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Albert, U.S. Patent No. 5,941,949.

Specification

4. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the specification does not describe or provide proper antecedent basis for "computer readable medium."

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 56-64 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 56 is directed to a system comprising an interface module, a port module, and a connection manager. According to Applicant's specification, modules may be implemented as pure software programs. Further according to Applicant's specification, "the connection manager 220 is running in the background on the server 206." The connection manager is therefore simply an software application.

Because the system of claim 56 is comprised solely of three software programs, the system is merely software. Software is not statutory under § 101. Therefore, claim 56 is directed to non-statutory subject matter. Claims 57-64 are rejected based on their dependency on claim 56.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 3, 5-9, 11-13, 38-40, 43, and 47-64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Albert et al, U.S Patent No. 6.970.913 ["Albert"], in further view of DeBettencourt et al, U.S. Patent No. 6.279.001 ["DeBettencourt"].
7. All citations are to Albert unless otherwise noted.
8. As to claims 1, 47 and 56, Albert discloses a method, medium, and system for identifying a status corresponding to interactions between a remote application and a data source, the method comprising:
 - providing at least one interface module to interface with a remote application [Fig. 2a «item 231»: the forwarding agents interface with the client application];
 - providing at least one port module to interface between the interface module and the data source [Fig. 14: ports of the virtual machine read on the port module as they interface between the forwarding agent and the virtual machine (server) | column 29 «lines 4-15»];
 - providing a connection manager to facilitate the interface between the interface module and the port module [Fig. 2a «item 241»];

wherein the connection manager receives a request for the data source from the interface module [column 4 «lines 27-33»], and transmits an identifier of an available port module to the interface module [column 7 «lines 60-63» | column 8 «lines 1-22» where: the service manager sends an affinity key to the forwarding manager where the affinity key includes destination port number for a port on the server |];

connecting directly the interface module and the port module for communicating independently from the connection manager [Fig. 2A | Fig. 3A: the forwarding agent connects directly to the server independent of the service manager];

wherein the interface module connects directly with the port module based on the identifier transmitted by the connection manager [column 7 «lines 53-55»: forwarding agent connects to the applications that correspond to the port numbers | column 4 «lines 33-40»];

wherein subsequent communication from the interface module to the port module after the interface module connects directly with the port module is independent of the connection manager [column 4 «lines 27-40»: the service manager in this embodiment only provides load balancing functions; the forwarding agent and the server communicate independently after the manager selects the appropriate server];

generating a log file comprising an arbitrary set of parameters selectively established to reflect a status of a connection between the remote application and the data source desired to be monitored [*DeBettencourt*: Figure 9 | column 5 «lines 25-39» | column 11 «lines 46-50» | column 18 «lines 12-17»].

It would have been obvious one of ordinary skill in the art to incorporate DeBettencourt's teachings of a log file into Albert's system. DeBettencourt teaches several

benefits of a log file such as the ability to recover from system failures [column 11 «lines 45-50»], logging of error events [column 11 «lines 63-65»], and analysis of network performance related to the connection [column 15 «lines 45-55»]. One would have been motivated to incorporate a log file into Albert for the benefits as described by DeBettencourt.

9. As to claim 3, Albert does not expressly disclose that the parameters are user-selectable. DeBettencourt discloses that the parameters in the log file are user-selectable [Figure 9 | column 18 «lines 25-26 and 46-47»]. It would have been obvious to one of ordinary skill in the art to incorporate user-selectable parameters in the log file into Albert. One would have been motivated to modify Albert in order enhance an administrator's ability to monitor the connections.

10. As to claims 5, 48, and 57, Albert does not expressly disclose the parameters. DeBettencourt discloses wherein at least one the parameters is selected from the group consisting of a present SQL request, a warning message, an error message, a date, a time, a previous SQL request, a feature database scheme, and a number of records [column 18 «lines 18-51»]. It would have been obvious to one of ordinary skill in the art to incorporate user-selectable parameters in the log file into Albert. One would have been motivated to modify Albert in order enhance an administrator's ability to monitor the connections.

11. As to claims 6, 7, 49, 50, 58, and 59, Albert does not expressly disclose limiting the number of parameters. DeBettencourt discloses that the number of parameters within the log file

can be configured, and therefore limited or expanded depending on the user's preference to reflect the history of interactions between the remote application and the data source [column 18 «lines 25-26 and 46-47»]. It would have been obvious to one of ordinary skill in the art to incorporate configurable parameters in the log file into Albert. One would have been motivated to modify Albert in order enhance an administrator's ability to monitor the connections.

It should be noted that, with respect to claims 6 and 7, the limitations "in order to reduce processing time of a request to the data source" and "to reflect a detailed history of interactions" are not given patentable weight because they merely "express[es] the intended result of a process step positively recited." *See MPEP §2111.04*. If a reference teaches limiting or expanding the number of parameters, that reference is capable of reducing the processing time of a request to the data source or reflecting the history of interactions. Therefore, DeBettencourt teaches the claimed limitation.

12. As to claims 8, 51, and 60, Albert discloses hosting the interface module on a first computer distinct from a second computer hosting the data source [Fig. 2A «items 231 and 220»].

13. Regarding claims 9, 52, and 61, Albert discloses the invention substantially, as claimed, as described, including hosting interface module is separate computer from data source. Albert does not explicitly disclose the interface is hosted in the data source computer. However, relocating interface module from other computer to data source computer is merely a part rearranging parts, which does not modify operation of the device, i.e., no matter where the

interface module located it's connectivity to the port module still is being control by connection manager, which court held that is unpatentable. *In re Japikse*, 18 F.2d 1019,86 USPQ 70 (CCPA 1950).

14. As to claims 11, 53, and 62, as they do not teach or further define over the limitations of claim 5, they are rejected for at least the same reasons set forth for claim 5.

15. As to claims 12, 54, and 63, Albert does not expressly disclose arranging the parameters in hierarchical relation. DeBettencourt teaches arranging the parameters in hierarchical relation [Figures 6, 9]. It would have been obvious to one of ordinary skill in the art to incorporate the display interface of DeBettencourt's log file into Albert. One would have been motivated to modify Albert in order enhance an administrator's ability to monitor the connections.

16. As to claims 13, 55, and 64, Albert does not expressly disclose the at least one parameter of the arbitrary set of parameters corresponds to an output device selected by a user. DeBettencourt discloses at least one parameter of the arbitrary set of parameters corresponds to an output device selected by a user [column 18 «lines 34-51»]. It would have been obvious to one of ordinary skill in the art to incorporate the parameters of DeBettencourt's log file into Albert. One would have been motivated to modify Albert in order enhance an administrator's ability to monitor the connections.

17. As to claim 38, Albert discloses a port module communicates independently with only one interface module at a time [column 31 «lines 1-3» where: a user can independently budget how many connections are allowed for each port, thus allowing a user to set the number of connections to one].

18. As to claims 39 and 40, Albert discloses that a connection manager determines that the port module corresponding to the identifier transmitted to the interface module is not available to be assigned to another interface module [column 4 «lines 41-65» | column 30 «lines 61-65»] and that the port module reports the availability to the manager [column 30 «lines 21-31»].

19. As to claim 43, Albert discloses the interface module receives a request for information from the data source, the received request being addressed to the interface module [Fig 3B : SYN ACK packet sent from the server to the forwarding agent].

20. Claims 41 and 42 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Albert and DeBettencourt, in further view of Yousefi'zadeh, U.S Patent No. 6.950.848 [“Yousefi”].

21. As to claims 41 and 42, Albert does not disclose performing a conversion of a request from a first to second format wherein the first format is HTML and the second format is SQL. However, conversion of an HTML format to a SQL format was a well known feature in the art at the time of Applicant's invention as evidenced by Yousefi. Yousefi discloses a load balancing method for retrieving data from database servers [abstract]. Further like Albert, Yousefi

discloses an interface module [Figure 1a «item 28»] and a port module [Figure 1a «item 30»]. Yousefi further teaches that the interface module translates a received request from HTML to SQL [column 7 «lines 28-30»]. It would have been obvious to one of ordinary skill in the art to have modified Albert's system with the HTML-to-SQL feature taught by Yousefi. Yousefi discloses that such an arrangement was conventional and well known in the art at the time of Applicant's invention for providing an interface to a normal web client to access back-end database environments [column 5 «lines 48-61»]. Thus, one of ordinary skill in the art would have been motivated to so modify Albert in order to enable this type of access to back-end databases.

22. Claims 44-46 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Albert and DeBettencourt, in further view of Polizzi et al, U.S. Patent Publication No. 2002/0023158 [“Polizzi”].

23. As to claim 44, Albert does not disclose the user establishing the set of parameters but Polizzi does disclose the set of parameters are established by a user of the remote application [column 6 «lines 34-39»: disclosing an administrator who controls the manager through a user interface on a console]. It would have been obvious to one of ordinary skill in the art to have modified Albert to include Polizzi's teachings. Because Albert and Polizzi are directed to similar inventions, such a modification to Albert's invention is merely an example of using a known technique (Polizzi's user establishing a set of parameters) to improve similar systems (Albert's load balancing system) in the same way. *See MPEP § 2143.*

24. As to claim 45, Albert does not disclose the claimed limitations but Polizzi discloses wherein the port module determines a status of the data source,

wherein if the status of the data source is active, the port module relays communication between the interface module and the data source [0036, 0098: dispatches requests only to operational data sources],

wherein if the status of the data source is inactive, the port module provides an error message to the interface module [0036, 0098: error notification sent to the interface module when the attempted connection fails].

It would have been obvious to one of ordinary skill in the art to have modified Albert to include the status functionality taught by Polizzi. Because Albert and Polizzi are directed to similar inventions, such a modification to Albert's invention is merely an example of using a known technique (Polizzi's status determination feature) to improve similar systems (Albert's load balancing system) in the same way (determining whether the data source is available). *See MPEP § 2143.*

25. As to claim 46, Albert does not disclose the claimed limitations but Polizzi discloses wherein the port module determines that the data source is inactive, the port module reestablishes a connection with the data source when the data source becomes active [0098, 0099: discussing retry functionality wherein the port module attempts to connect to the data source based on a user-configurable delay]. It would have been obvious to one of ordinary skill in the art to have modified Albert to include Polizzi's retry functionality. Because Albert and Polizzi are directed

to similar inventions, such a modification to Albert's invention is merely an example of using a known technique (Polizzi's retry functionality) to improve similar systems (Albert's load balancing system) in the same way (reestablishing a connection with the data source). *See MPEP § 2143.*

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

See attached PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DOHM CHANKONG whose telephone number is (571)272-3942. The examiner can normally be reached on Monday-Friday [8:30 AM to 4:30 PM].

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on 571.272.3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dohm Chankong/
Primary Examiner, Art Unit 2452